From: "Zell, Christopher" <zell.christopher@epa.gov>
To: "Hodgkiss, Miranda" <Hodgkiss.Miranda@epa.gov>
"Cope, Ben" <Cope.Ben@epa.gov>
Date: 7/16/2018 7:39:46 AM
Subject: RE: Draft TD for Deschutes TMDLs

Good Morning U2,

Attached are my thoughts. Looks good, very thoughtful. If you want to dive further into the weeds (b)(5), let's schedule a meeting? Happy to help out in whatever way makes sense. :) Copying Dave as Dan asked me to stay engaged a few months ago (closing the loop de' loop).

Best,

Chris

Chris Zell, PHWQ

Regional Water Monitoring Coordinator | Life Scientist

U.S. Environmental Protection Agency | Region 10

P: (206) 553.1353 | zell.christopher@epa.gov <mailto:zell.christopher@epa.gov>

From: Hodgkiss, Miranda
Sent: Friday, July 13, 2018 4:06 PM
To: Zell, Christopher <zell.christopher@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>
Subject: Draft TD for Deschutes TMDLs

Hi Chris and Ben,

I've put together this draft technical direction for a contractor to work on the Deschutes TMDL revisions. I've struggled with how much information to put in there. Feel free to let me know if it is too much or too little. And particularly if there is something critical missing for the modeling tasks. I will leave it to the two of you to figure out who can review this, or if you would both like to provide input. Would it be possible to get some feedback a week from today (7/20)?

(b) (5) [redacted]

And then last, I also need to talk more about this with Dave, but do you think there is a possibility of getting one of you involved longer-term to be a co-technical lead with me to help out with the model review?

Thanks for your help!

Miranda Hodgkiss

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Technical Direction (TD)

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Title: *Water Quality Modeling and TMDL Development for the Deschutes River, Percival Creek and Budd Inlet Tributaries*

Date of Technical Direction Discussion or Issuance: (b) (5)

Estimated Level of Effort: XX hours

Purpose: Provide technical and modeling support for the revision of state-developed TMDLs for multiple parameters in the Deschutes River.

Background, Tasks, Deliverables and Schedule:

Background

There is currently a multi-phase process to address water quality impairments for waters flowing into South Puget Sound. The Deschutes River originates in heavily forested regions of the Bald Hills and flows northward to Capitol Lake, which then flows to Budd Inlet, which connects to Puget Sound. Capitol Lake was formed in 1951 as an impoundment of the Deschutes estuary to create a reflecting pool for the State Capitol building. The Washington Department of Ecology ('Ecology') developed the Deschutes TMDL to address the riverine segments upstream of Capitol Lake and Budd Inlet. The watershed covered in the Deschutes TMDL includes the Deschutes River, Percival Creek, and tributaries to Budd Inlet. It is situated within the boundaries of Thurston and Lewis Counties in Washington and includes the cities or towns of Olympia, Lacey, Tumwater, and Rainier. The TMDL was written to address impairments for bacteria, temperature, dissolved oxygen (DO), pH, and fine sediment. Ecology submitted the TMDL to EPA in 2015, and provided supplemental information in 2017.

EPA took a partial approval and partial disapproval action on the TMDL (comprised of 73 unique waterbody-pollutant pairs) on June 29, 2018. The disapproved portions, listed below, will need to be revised and established by EPA.

- Bacteria – 17 pairs (b) (5)
- Temperature – 5 pairs
- DO – 11 pairs
- pH – 3 pairs
- Fine sediment – 1 pair

Ecology is currently developing a TMDL for Budd Inlet. In considering downstream impacts to Budd Inlet, EPA, Ecology, and the contractor working on the revised Deschutes TMDL will need to coordinate closely on the modeling to make sure the TMDLs align with one another.

(b) (5)

Tasks

1. The Contractor will set up two initial planning conference calls. The first conference call will include representatives from EPA and the Contractor to discuss the project background, scope, goals, schedule, and projected outcomes and outputs. The goal of the first call will be to provide the Contractor with enough information to begin working on the tasks outlined in this technical direction. The second planning call will include representatives from EPA, Ecology, and the Contractor. The purpose of this call will be to learn from Ecology about their work on the Budd Inlet TMDL, and any areas of concern or overlap that we should be aware of in the development of the Deschutes TMDL. Both of these calls will establish a schedule for regular check-in calls with two teams: (1) EPA and the Contractor; and (2) EPA, Ecology, and the Contractor. All contact information is listed below. The Contractor will put together notes from the call summarizing key points, outcomes, and action items.

2. The Contractor will set up regular check-in calls, as described in Task #1. The frequency of the calls will be determined during the initial planning calls. The purpose of the calls with EPA and Ecology will be to check-in on concurrent progress being made on the modeling for the Budd Inlet TMDL and the Deschutes TMDL, share input/output files and model results, and resolve any technical concerns. The check-in calls with EPA will be to discuss draft products, have more in-depth discussions on areas needing more focus, and resolve technical concerns. The Contractor will put together notes from each call summarizing key points, outcomes, and action items.

3. The Contractor will set up a file transfer site for participants to upload data and information.

4. The Contractor will develop a draft TMDL technical approach memorandum. It will include a summary of relevant data and information and recommended approach(s) to revise the existing QUAL2k model and how those data will be used in the updates to the models. (b) (5) It should also include the approach that will be used to revise the disapproved segments of the TMDL (i.e. how the loading capacity and wasteload and load allocations will be determined). The Contractor will address a maximum of one set of comments from EPA and finalize the technical approach memorandum.

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5. The Contractor will use the existing base steady-state QUAL2k model (already calibrated) as a starting point for developing new TMDL loading capacities, load allocations, and wasteload allocations. The Contractor should prepare a summary of the model outputs, including tables, figures, and other relevant outputs that document the application of the model and the TMDL loading analyses. The Contractor should provide this summary as an appendix to the TMDL, which will undergo public review along with the TMDL. The Contractor should be prepared to provide EPA with any requested model input/output data and/or an organized model package upon EPA's request. The Contractor will address a maximum of two sets of comments from EPA and finalize the modeling analysis summary. The updates to the model will include the following:

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After the public notice period has ended, the Contractor will develop responses to public comments received. EPA will have one opportunity to review the responses to public comments before they are finalized. The Contractor will make any necessary changes to the document based on public comments, and provide a final version to EPA. (b) (5) The specific revisions needed include:

(b)(5)

Deliverables and Schedule

Task	Deliverable	Due Date
1 & 2. Kick-off conference call and check-in calls	Call notes summarizing key points, outcomes, and action items	Within 5 working days of the conference calls.
3. File transfer site	A site that can be viewed and used	Within 1 month of the first

	by EPA, Ecology, and the Contactor to share files.	kick-off call.
4. Technical approach memorandum	Draft and final technical approach memorandum, including a tracked version to show how comments were addressed.	Draft: within 1 month of the first kick-off call. Final: within 5 working days of receipt of EPA comments on draft.
5. QUAL2k modeling	Summary of updated model results and outputs as an appendix to TMDL document.	Draft: XX Revised Draft: XX Final: XX
6. TMDL report	Revised TMDL document. Response to comments document, as an appendix to the TMDL document.	Draft TMDL: XX Revised Draft TMDL: XX Final TMDL: XX Draft Responses to Comments: XX Final Responses to Comments: XX

As the EPA Task Order Contract Officer Representative (TOCOR), I have considered the sensitivity of any information generated by this TD. The following applies:

[X] I have no reason to believe that any sensitive information will be generated as part of this TD
[ ] I have reason to believe that sensitive information will be generated as part of this TD. The following safeguard measures shall be implemented: N/A

[X] This TD does not include additional work outside the scope of the task order.
[X] This TD will not cause an increase or decrease in the estimated cost of the task order.

Contact Information:

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EPA Technical Contacts
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Chris Zell (or Ben?) – Lead on modeling analysis

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Ecology Technical Contact
Leanne??